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#### INTRODUCTION

This fact sheet is a companion document to the draft State Waste Discharge Permit No. ST 6172. The Department of Ecology (Department) is proposing to issue this permit, which will allow discharge of wastewater to the Cowlitz Water Pollution Control Plant (Publicly Owned Treatment Works) through the City of Longview Sewer Collection System. This fact sheet explains the nature of the proposed discharge, the Department's decisions on limiting the pollutants in the wastewater, and the regulatory and technical bases for those decisions.

Washington State law (Revised Code of Washington [RCW 90.48.080 and 90.48.160]) requires that a permit be issued before discharge of wastewater to waters of the state is allowed. This statute includes commercial or industrial discharges to sewerage systems operated by municipalities or public entities which discharge into public waters of the state. Regulations adopted by the state include procedures for issuing permits and establish requirements which are to be included in the permit (Chapter 173-216 Washington Administrative Code [WAC]).

This fact sheet and draft permit are available for review by interested persons as described in Appendix A—Public Involvement Information.

The fact sheet and draft permit have been reviewed by the Permittee. Errors and omissions identified in these reviews have been corrected before going to public notice. After the public comment period has closed, the Department will summarize the substantive comments and the response to each comment. The summary and response to comments will become part of the file on the permit and parties submitting comments will receive a copy of the Department's response. The fact sheet will not be revised. Changes to the permit will be addressed in Appendix D—Response to Comments.

**Table 1: General information** 

Applicant	Ciba Specialty Chemicals
Facility Name and Address	Ciba Specialty Chemicals 1140 Industrial Way Longview, WA 98632
Type of Facility:	Non-classifiable Establishment
Standard Industrial Classification (SIC) Code	9999
Facility Discharge Location	Latitude: 46° 00' 07" N Longitude: 122° 56' 36" W
Treatment Plant Receiving Discharge	Cowlitz Water Pollution Control Plant (POTW) through the City of Longview Sewer Collection System
Contact at Facility	Name: William Pietz Telephone (360) 636-3138
Responsible Official	Name: William Pietz, Manager Address: 1140 Industrial Way Longview, WA 98632 Telephone (360) 636-3138 FAX (360) 636-1264

#### **BACKGROUND INFORMATION**

#### DESCRIPTION OF THE FACILITY

Ciba Specialty Chemicals (Ciba) has a distribution and sales center for western region in Longview. The Longview Distribution Center (Ciba) stores, and if needed, repackages chemicals at the Longview warehouse. It also produces two materials on site.

The applicable Standard Industrial Classification (SIC) Code was reported in the application as 9999, Non-classifiable Establishments. Based on the reported SIC Code the Department concludes that the facility is not subject to Categorical Pretreatment Standards under 40 CFR 403.6 and 40 CFR Chapter I, Subchapter N.

Further, the facility discharges on an average less than 25,000 gallons per day of process wastewater to the POTW (excluding sanitary, noncontact cooling and boiler blowdown wastewater) and contributes a process wastestream which makes less than 5 percent of the average dry weather hydraulic or organic capacity of the POTW treatment plant.

Moreover, the facility is not designated by the Department as defined in 40 CFR 403.12(a) on the basis that the industrial user has a reasonable potential for adversely affecting the POTW's operation or for violating any pretreatment standard or requirement (in accordance with 40 CFR 403.8(f)(6)).

Therefore, the facility is not a Significant Industrial User.

### **HISTORY**

On March 3, 1997, a request was received by the City of Longview from Allied Colloids, the previous operator of the business, to allow discharge to sanitary sewer of wastewater from the production of activated silica at the site. As a result of that request, an application for a new permit from the state of Washington, which maintains permitting authority for industrial discharges to municipal systems, was received by the Department June 22, 1998. Because no action was taken by the Department to issue or deny a permit within 60 days, in accordance with state regulations, the applicant was deemed to have received a temporary permit to discharge as requested until such action was taken. A letter dated October 28, 1998, informed the applicant the Department would probably act on the application during the 12-month period between July 1, 2000, and June 30, 2001. During that time the business was sold to Ciba. The required documentation of the transfer of ownership and permit responsibility was received, and in accordance with state regulations, the temporary permit was automatically transferred to Ciba. On August 16, 2001, the temporary permit was replaced with the state waste discharge permit issued by the Department on that day.

#### INDUSTRIAL PROCESSES

The Longview Distribution Center stores, and if needed, repackages chemicals at the Longview warehouse. Repackaging operations involves reloading liquid or dry polymer from drums or ton containers into bulk trucks.

Two materials are produced on the site. One product consists of mixing bentonite in water to produce slurry. Second product, an activated silica solution called Particol CA, is produced on site by mixing the raw materials in process vessels. No reactions or distillation process steps occur. The activated silica is used as retention aid in the paper industry. The silica solution is stored in bulk tanks on site and reloaded into trucks for outbound shipments. A detailed list of raw materials and products can be found on page 3 of the application.

<sup>&</sup>lt;sup>1</sup> Application to Discharge Industrial Wastewater to a POTW 11/4/2005

Ciba operates 8 hours a day, 7 days a week, 52 weeks a year.

#### TREATMENT PROCESSES

Without control, the pH of the wastewater might range from about 2.5 to about 10. The pH of each batch of the wastewater, prior to discharge, is automatically adjusted in the wastewater treatment tank through the addition of sulfuric acid or sodium hydroxide and agitation. A pH probe activates peristaltic pumps to inject the acid (sulfuric acid) or base (25 percent caustic soda). The batch discharge is also automatically controlled, but can be manually overridden.

The volume of discharge is measured by a magnetic flow meter. If the wastewater meets a pH specification of 6.5 to 7.5 it is automatically discharged in to the sanitary sewer. A programmable logic controller (PLC), maintains process control. An average of 728 gallons per day is discharged.

If the pH in the primary wastewater is below 6.4 or above 7.6 it is not discharged to the sewer but diverted into a wastewater holding tank located outside the building. The wastewater holding tank is equipped with a pH probe, level transmitter and compressed air to provide agitation for mixing. pH specification within the holding vessel is 6.0 to 9.0. When the pH is within the specified range it is discharge to the sanitary sewer via a flexible hose. Discharge from the holding vessel is not automatic and requires the presence of a Ciba employee.

#### PERMIT STATUS

The previous permit for this facility was issued on August 16, 2001.

An application for permit renewal was submitted to the Department on November 23, 2004, and rejected by the Department on April 21, 2005, due to the following information required but not provided with the application:

- Applicant Name; Page 1 of 17, Section A, item 1
- Facility Name; Page 1 of 17, Section A, item 2
- Facility Location Address; Page 1 of 17, Section A, item 4
- Contact person E-Mail; Page 1 of 17, Section A, item 8
- Wastewater Information; Page 7-8 of 17, Section E, item 2
- Waste designation; Page 14 of 17, Section I, item 3
- Approval by Publicly-Owned Treatment Works; Page 15 of 17, Section J, item 1
- Application review by Intermediate Sewer Owner at point of discharge; Page 15 of 17, Section J, item 2

The Permittee was requested to submit a complete application in thirty days from the day the April 21, 2005, letter was received. The application was resubmitted on May 19, 2005, and accepted on May 26, 2005. The acceptance letter noted that the wastewater information, page 7 & 8, Section E, item 2, was still missing. The letter asked Ciba to submit the wastewater information in thirty (30) days.

The wastewater information was received during a meeting and inspection on May 31, 2005. The list of parameters tested was reviewed during the meeting and Ciba was notified that the following parameters are still missing:

- Oil and Grease (O&G)
- Thallium
- Five-day biochemical oxygen demand (BOD<sub>5</sub>)
- Total Suspended Solids (TSS)

On June 1, 2005, the following was received from Keith Gardner, Cowlitz Water Pollution Control, "...We would request that Thallium be removed from any proposed local limits and any industrial testing

requirements...." Considering the request Thallium is removed from the list of parameters required to be tested.

### SUMMARY OF COMPLIANCE WITH THE PREVIOUS PERMIT

The facility last received an inspection on May 31, 2005.

During the history of the previous permit, the Permittee has remained in compliance with permit limits based on Discharge Monitoring Reports (DMRs) and other reports submitted to the Department and inspections conducted by the Department.

However, according to the November 10, 2004 letter, the Permittee failed to submit the DMRs on time for May-September 2004.

### WASTEWATER CHARACTERIZATION

The concentration of pollutants in the discharge was reported in the permit application and in discharge monitoring reports. The proposed wastewater discharge is characterized for flow and pH in **Table 2**,

Figure 1, and Figure 2.

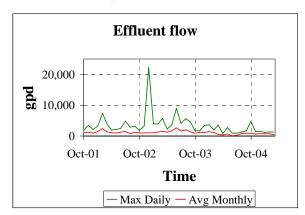
**Table 2 Wastewater characterization** 

Parameter	Number of data points	Units	Minimum	Maximum	Document
Flow, maximum daily		gpd		3,654	2005 application
Flow, average monthly		gpd		1,126	2005 application
рН		Standard units (SU)	6.17	8.70	2005 application
Arsenic (total)		Micrograms per liter (µg/L)	<5		2005 application
Antimony		μg/L	<50		2005 application
Barium (total)		μg/L	8.3		2005 application
Cadmium (total)		μg/L	<5		2005 application
Chromium (total)		μg/L	<5		2005 application
Copper (total)		μg/L	<10		2005 application
Lead (total)		μg/L	<2		2005 application
Mercury		μg/L	<0.2		2005 application

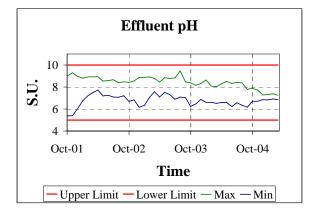
 Table 2 Wastewater characterization

Parameter	Number of data points	Units	Minimum	Maximum	Document
Molybdenum (total)		μg/L	<10		2005 application
Nickel (total)		μg/L	<20		2005 application
Selenium (total)		μg/L	<5		2005 application
Silver (total)		μg/L	<10		2005 application
Zinc (total)		μg/L	<10		2005 application
Cyanide, Total		Milligrams per liter (mg/L)	<0.01		2005 application
Flow, maximum daily	42	Gallons per day (gpd)	802	22,210	DMRs
Flow, average monthly	42	gpd	100	2,679	DMRs
pН	42	SU	5.39	9.47	DMRs
Five-day biochemical oxygen demand (BOD <sub>5</sub> )		mg/L	<4 & <4		1998 application & 2005 application
Total Suspended Solids (TSS)		mg/L	4,620 & 110		1998 application & 2005 application
Oil and Grease (O&G)		mg/L		<5.0	2005 application

Figure 1 Flow—maximum daily and average monthly



**Figure 2** pH—instantaneous minimum and maximum values in a given month



#### PROPOSED PERMIT LIMITATIONS

State regulations require that limitations set forth in a waste discharge permit must be based on the technology available to treat the pollutants (technology-based) or be based on the effects of the pollutants to the POTW (local limits). Wastewater must be treated using all known, available, and reasonable treatment (AKART) and not interfere with the operation of the POTW.

The minimum requirements to demonstrate compliance with the AKART standard and specific design criteria for this facility have not been determined yet. Therefore this permit will require the Permittee to set AKART for the facility.

The more stringent of the local limits-based or technology-based limits will be applied to each of the parameters of concern in future permits. The permit limits are based on the local limits. Each of these types of limits is described in more detail below.

#### TECHNOLOGY-BASED EFFLUENT LIMITATIONS

All waste discharge permits issued by the Department must specify conditions requiring available and reasonable methods of prevention, control, and treatment of discharges to waters of the state (WAC 173-216-110). The facility is not subject to Categorical Pretreatment Standards under 40 CFR 403.6 and 40 CFR chapter I, subchapter N. The permit limitations that are necessary to satisfy the requirement for AKART will be established by the Permittee and reported to the Department in the AKART report.

### EFFLUENT LIMITATIONS BASED ON LOCAL LIMITS

In order to protect the Cowlitz County Pollution Control Publicly Owned Treatment Works from passthrough, interference, concentrations of toxic chemicals that would impair beneficial or designated uses of sludge, or potentially hazardous exposure levels, limitations for certain parameters are necessary. These limitations are based on local limits established by:

City of Longview and codified in the Longview Municipal Code, Chapter 15.26 Sewage Disposal (Table 3);

Cowlitz County and codified in the Cowlitz County Code, Chapter 15.14 Water and Sewer Utilities Regulations (Table 4); and

Cowlitz Water Pollution Control (CWPC)—preliminary local limits under development (Table 5).

Table 3 Limitations codified in the Longview Municipal Code, Chapter 15.26 Sewage Disposal

Parameter	Units	Minimum	Maximum
рН	Standard units (SU)	5.0	10
Temperature at the introduction to the POTW	Degrees Fahrenheit (°F)		104

Table 4 Limitations codified in the Cowlitz County Code, Chapter 15.14 Water and Sewer Utilities Regulations

Parameter	Units	Minimum	Maximum
pН	Standard units (SU)	5.5	9.0
Temperature	Degrees Fahrenheit (°F)		150
Fat, oil or grease (FOG)	Parts per million (ppm)		100

Table 5 Cowlitz Water Pollution Control—preliminary local limits under development as suggested by the Department in an email to the CWPC dated April 27, 2005.

Parameter	Units	Minimum	Maximum
рН	Standard units (SU)	6.0	11 <sup>3</sup>
Petroleum based oils <sup>4</sup>	Milligrams per liter (mg/L)		50-100
FOG	mg/L		100 <sup>5</sup>
cyanide	mg/L		0.2-0.64
Antimony	mg/L		10.
Arsenic	mg/L		0.2
Cadmium	mg/L		0.1
Chromium, Hexavalent Chr +6	mg/L		10.

<sup>&</sup>lt;sup>3</sup> Maximum allowed under WAC 173-216-060

<sup>&</sup>lt;sup>4</sup> As measured by EPA method 1664 SGT-HEM (Silicon Gel Treated – Hexane Extraction Method)

<sup>&</sup>lt;sup>5</sup> The limit will not be applied if an appropriately sized grease interceptor is approved by the municipality and installed and maintained (and records kept or a certification statement submitted every six months depending on how you run this program).

Chromium (Trivalent) Chr +3	mg/L	10.
Copper	mg/L	3.5
Cyanide	mg/L	1.7
Lead	mg/L	0.5
Mercury	mg/L	0.02
Molybdenum	mg/L	0.1
Nickel	mg/L	2.3
Selenium	mg/L	0.5
Silver	mg/L	0.2
Thallium	mg/L	1.8
Zinc	mg/L	4.2

Based on the wastewater information provided in the 2005 application there is no reasonable potential to violate any limits listed in Table 3, Table 4 and Table 5 except pH. However, TSS was high when reported in the 1998 application. Monitoring of TSS is required in this permit.

COMPARISON OF LIMITATIONS WITH THE EXISTING PERMIT ISSUED AUGUST 16, 2001

Table 6 Comparison of limitations with the existing permit

Parameter	Units	<b>Existing Limits</b>	Proposed Limits
Flow	Gallons per day (gpd)	None	9,999
рН	Standard units (SU)	Between 5.0 and 10	Between 5.0 and 10

The flow permit limit is based on the 2005 application.

The lower pH permit limit is based on the Longview Municipal Code, Chapter 15.26 Sewage Disposal. The upper pH permit limit of 10.0 is based on the existing permit limit. The Longview Municipal Code would allow pH limit of 10.

### MONITORING REQUIREMENTS

Monitoring, recording, and reporting are specified to verify that the treatment process is functioning correctly, and that effluent limitations are being achieved (WAC 173-216-110).

The monitoring schedule is detailed in the proposed permit under Condition S2. Specified monitoring frequencies take into account the quantity and variability of the discharge, the treatment method, past compliance, significance of pollutants, and cost of monitoring.

Monitoring Total Suspended Solids (TSS) is being required to further characterize the effluent. These pollutant(s) could have a significant impact on the receiving POTW.

**Table 7 Outfall description** 

Monitoring Point	Outfall	Parameters Monitored
Discharge from the wastewater treatment tank	001	Flow, pH & TSS
Discharge from the wastewater holding tank	002	Flow & pH

#### OTHER PERMIT CONDITIONS

#### REPORTING AND RECORDKEEPING

The conditions of S3 are based on the authority to specify any appropriate reporting and recordkeeping requirements to prevent and control waste discharges (WAC 173-216-110 and 40 CFR 403.12 (e),(g), and (h)).

#### OPERATIONS AND MAINTENANCE

The proposed permit contains condition S.4. as authorized under Chapter 173-240-150 WAC and Chapter 173-216-110 WAC. It is included to ensure proper operation and regular maintenance of equipment, and to ensure that adequate safeguards are taken so that constructed facilities are used to their optimum potential in terms of pollutant capture and treatment. The proposed permit requires an annual review and submission of substantial changes to the O&M Manual.

#### PROHIBITED DISCHARGES

Certain pollutants are prohibited from being discharged to the POTW. These include substances which cause pass-through or interference, pollutants which may cause damage to the POTW or harm to the POTW workers (Chapter 173-216 WAC) and the discharge of designated dangerous wastes not authorized by this permit (Chapter 173-303 WAC).

### DILUTION PROHIBITED

The Permittee is prohibited from diluting its effluent as a partial or complete substitute for adequate treatment to achieve compliance with permit limitations.

#### GENERAL CONDITIONS

General Conditions are based directly on state laws and regulations and have been standardized for all industrial waste discharge to POTW permits issued by the Department.

Condition G1 requires responsible officials or their designated representatives to sign submittals to the Department. Condition G2 requires the Permittee to allow the Department to access the treatment system, production facility, and records related to the permit. Condition G3 specifies conditions for modifying, suspending or terminating the permit. Condition G4 requires the Permittee to apply to the Department prior to increasing or varying the discharge from the levels stated in the permit application. Condition G5 requires the Permittee to construct, modify, and operate the permitted facility in accordance with approved engineering documents. Condition G6 prohibits the Permittee from using the permit as a basis

for violating any laws, statutes or regulations. Conditions G7 and G8 relate to permit renewal and transfer. Condition G9 requires the Permittee to control production or wastewater discharge in order to maintain compliance with the permit. Condition G10 prohibits the reintroduction of removed pollutants into the effluent stream for discharge. Condition G11 requires the payment of permit fees. Condition G12 describes the penalties for violating permit conditions.

#### PUBLIC NOTIFICATION OF NONCOMPLIANCE

A list of all industrial users which were in significant noncompliance with Pretreatment Standards or Requirements during any of the previous four quarters may be annually published by the Department in a local newspaper. Accordingly, the Permittee is apprised that noncompliance with this permit may result in publication of the noncompliance.

#### RECOMMENDATION FOR PERMIT ISSUANCE

This proposed permit meets all statutory requirements for authorizing a wastewater discharge, including those limitations and conditions believed necessary to control toxics. The Department proposes that the permit be issued for 5 years.

#### REFERENCES FOR TEXT AND APPENDICES

Washington State Department of Ecology.

Laws and Regulations (http://www.ecy.wa.gov/laws-rules/index.html)

Permit and Wastewater Related Information (http://www.ecy.wa.gov/programs/wq/wastewater/index.html

#### APPENDICES

#### APPENDIX A—PUBLIC INVOLVEMENT INFORMATION

The Department has tentatively determined to reissue a permit to the applicant listed on page 1 of this fact sheet. The permit contains conditions and effluent limitations which are described in the rest of this fact sheet.

Public notice of application was published on June 20, 2005, and June 30, 2005, in The Daily News to inform the public that an application had been submitted and to invite comment on the reissuance of this permit.

The Department will publish a Public Notice of Draft (PNOD) on September 23, 2005 in Daily News to inform the public that a draft permit and fact sheet are available for review. Interested persons are invited to submit written comments regarding the draft permit. The draft permit, fact sheet, and related documents are available for inspection and copying between the hours of 8:00 a.m. and 5:00 p.m. weekdays, by appointment, at the regional office listed below. Written comments should be mailed to:

Industrial Unit Permit Coordinator Department of Ecology Southwest Region - Water Quality P.O.Box 47775 Olympia, WA 98504-7775

Any interested party may comment on the draft permit or request a public hearing on this draft permit within the thirty (30) day comment period to the address above. The request for a hearing shall indicate the interest of the party and reasons why the hearing is warranted. The Department will hold a hearing if it determines there is a significant public interest in the draft permit (WAC 173-216-100). Public notice regarding any hearing will be circulated at least thirty (30) days in advance of the hearing. People expressing an interest in this permit will be mailed an individual notice of hearing.

Comments should reference specific text followed by proposed modification or concern when possible. Comments may address technical issues, accuracy and completeness of information, the scope of the facility's proposed coverage, adequacy of environmental protection, permit conditions, or any other concern that would result from issuance of this permit.

The Department will consider all comments received within thirty (30) days from the date of public notice of draft indicated above, in formulating a final determination to issue, revise, or deny the permit. The Department's response to all significant comments is available upon request and will be mailed directly to people expressing an interest in this permit.

Further information may be obtained from the Department by telephone, (360) 407-6280, or by writing to the address listed above.

This permit was written by Jacek Anuszewski, P.E.

#### APPENDIX B—GLOSSARY

**Ammonia**—Ammonia is produced by the breakdown of nitrogenous materials in wastewater. Ammonia is toxic to aquatic organisms, exerts an oxygen demand, and contributes to eutrophication. It also increases the amount of chlorine needed to disinfect wastewater.

**Average Monthly Discharge Limitation**—The average of the measured values obtained over a calendar month's time.

**Best Management Practices (BMPs)**--Schedules of activities, prohibitions of practices, maintenance procedures, and other physical, structural and/or managerial practices to prevent or reduce the pollution of waters of the State. BMPs include treatment systems, operating procedures, and practices to control: plant site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage. BMPs may be further categorized as operational, source control, erosion and sediment control, and treatment BMPs.

 $BOD_5$ --Determining the Biochemical Oxygen Demand of an effluent is an indirect way of measuring the quantity of organic material present in an effluent that is utilized by bacteria. The  $BOD_5$  is used in modeling to measure the reduction of dissolved oxygen in a receiving water after effluent is discharged. Stress caused by reduced dissolved oxygen levels makes organisms less competitive and less able to sustain their species in the aquatic environment. Although BOD is not a specific compound, it is defined as a conventional pollutant under the federal Clean Water Act.

**Bypass**—The intentional diversion of waste streams from any portion of the collection or treatment facility.

**Categorical Pretreatment Standards**—National pretreatment standards specifying quantities or concentrations of pollutants or pollutant properties which may be discharged to a POTW by existing or new industrial users in specific industrial subcategories.

**Compliance Inspection - Without Sampling-**-A site visit for the purpose of determining the compliance of a facility with the terms and conditions of its permit or with applicable statutes and regulations.

**Compliance Inspection - With Sampling**—A site visit to accomplish the purpose of a Compliance Inspection - Without Sampling and as a minimum, sampling and analysis for all parameters with limits in the permit to ascertain compliance with those limits; and, for municipal facilities, sampling of influent to ascertain compliance with the 85 percent removal requirement. Additional sampling may be conducted.

Composite Sample—A mixture of grab samples collected at the same sampling point at different times, formed either by continuous sampling or by mixing discrete samples. May be "time-composite" (collected at constant time intervals) or "flow-proportional" (collected either as a constant sample volume at time intervals proportional to stream flow, or collected by increasing the volume of each aliquot as the flow increased while maintaining a constant time interval between the aliquots.

**Construction Activity**—Clearing, grading, excavation and any other activity which disturbs the surface of the land. Such activities may include road building, construction of residential houses, office buildings, or industrial buildings, and demolition activity.

**Continuous Monitoring** –Uninterrupted, unless otherwise noted in the permit.

**Engineering Report**—A document, signed by a professional licensed engineer, which thoroughly examines the engineering and administrative aspects of a particular domestic or industrial wastewater facility. The report shall contain the appropriate information required in WAC 173-240-060 or 173-240-130.

**Grab Sample**—A single sample or measurement taken at a specific time or over as short period of time as is feasible.

**Industrial User**—A discharger of wastewater to the sanitary sewer which is not sanitary wastewater or is not equivalent to sanitary wastewater in character.

**Industrial Wastewater**—Water or liquid-carried waste from industrial or commercial processes, as distinct from domestic wastewater. These wastes may result from any process or activity of industry, manufacture, trade or business, from the development of any natural resource, or from animal operations such as feed lots, poultry houses, or dairies. The term includes contaminated storm water and, also, leachate from solid waste facilities.

**Interference**— A discharge which, alone or in conjunction with a discharge or discharges from other sources, both:

Inhibits or disrupts the POTW, its treatment processes or operations, or its sludge processes, use or disposal and;

Therefore is a cause of a violation of any requirement of the POTW's NPDES permit (including an increase in the magnitude or duration of a violation) or of the prevention of sewage sludge use or disposal in compliance with the following statutory provisions and regulations or permits issued thereunder (or more stringent State or local regulations): Section 405 of the Clean Water Act, the Solid Waste Disposal Act (SWDA) (including title II, more commonly referred to as the Resource Conservation and Recovery Act (RCRA), and including State regulations contained in any State sludge management plan prepared pursuant to subtitle D of the SWDA), sludge regulations appearing in 40 CFR Part 507, the Clean Air Act, the Toxic Substances Control Act, and the Marine Protection, Research and Sanctuaries Act.

**Local Limits**—Specific prohibitions or limits on pollutants or pollutant parameters developed by a POTW.

**Maximum Daily Discharge Limitation**—The highest allowable daily discharge of a pollutant measured during a calendar day or any 24-hour period that reasonably represents the calendar day for purposes of sampling. The daily discharge is calculated as the average measurement of the pollutant over the day.

**Method Detection Level (MDL)--**The minimum concentration of a substance that can be measured and reported with 99 percent confidence that the analyte concentration is above zero and is determined from analysis of a sample in a given matrix containing the analyte.

**Pass-through**— A discharge which exits the POTW into waters of the—State in quantities or concentrations which, alone or in conjunction with a discharge or discharges from other sources, is a cause of a violation of any requirement of the POTW's NPDES permit (including an increase in the magnitude or duration of a violation), or which is a cause of a violation of State water quality standards.

**pH**—The pH of a liquid measures its acidity or alkalinity. A pH of 7.0 is defined as neutral and large variations above or below this value are considered harmful to most aquatic life.

**Potential Significant Industrial User**--A potential significant industrial user is defined as an Industrial User which does not meet the criteria for a Significant Industrial User, but which discharges wastewater meeting one or more of the following criteria:

- a. Exceeds 0.5 percent of treatment plant design capacity criteria and discharges <25,000 gallons per day or;
- b. Is a member of a group of similar industrial users which, taken together, have the potential to cause pass through or interference at the POTW (e.g. facilities which develop photographic film or paper, and car washes).

The Department may determine that a discharger initially classified as a potential significant industrial user should be managed as a significant industrial user.

**Quantitation Level (QL)--** A calculated value five times the MDL (method detection level).

### Significant Industrial User (SIU)--

- 1) All industrial users subject to Categorical Pretreatment Standards under 40 CFR 403.6 and 40 CFR Chapter I, Subchapter N and;
- 2) Any other industrial user that: discharges an average of 25,000 gallons per day or more of process wastewater to the POTW (excluding sanitary, noncontact cooling, and boiler blow-down wastewater); contributes a process wastestream that makes up 5 percent or more of the average dry weather hydraulic or organic capacity of the POTW treatment plant; or is designated as such by the Control Authority\* on the basis that the industrial user has a reasonable potential for adversely affecting the POTW's operation or for violating any pretreatment standard or requirement (in accordance with 40 CFR 403.8(f)(6)).

Upon finding that the industrial user meeting the criteria in paragraph 2, above, has no reasonable potential for adversely affecting the POTW's operation or for violating any pretreatment standard or requirement, the Control Authority\* may at any time, on its own initiative or in response to a petition received from an industrial user or POTW, and in accordance with 40 CFR 403.8(f)(6), determine that such industrial user is not a significant industrial user.

\*The term "Control Authority" refers to the Washington State Department of Ecology in the case of non-delegated POTWs or to the POTW in the case of delegated POTWs.

**Slug Discharge**—Any discharge of a non-routine, episodic nature, including but not limited to an accidental spill or a non-customary batch discharge to the POTW. This may include any pollutant released at a flow rate which may cause interference with the POTW.

**State Waters**—Lakes, rivers, ponds, streams, inland waters, underground waters, salt waters, and all other surface waters and watercourses within the jurisdiction of the state of Washington.

**Stormwater**—That portion of precipitation that does not naturally percolate into the ground or evaporate, but flows via overland flow, interflow, pipes, and other features of a storm water drainage system into a defined surface water body, or a constructed infiltration facility.

**Technology-based Effluent Limit**—A permit limit that is based on the ability of a treatment method to reduce the pollutant.

**Total Coliform Bacteria**—A microbiological test which detects and enumerates the total coliform group of bacteria in water samples.

**Total Dissolved Solids**—That portion of total solids in water or wastewater that passes through a specific filter.

**Total Suspended Solids (TSS)**--Total suspended solids is the particulate material in an effluent. Large quantities of TSS discharged to a receiving water may result in solids accumulation. Apart from any toxic effects attributable to substances leached out by water, suspended solids may kill fish, shellfish, and other aquatic organisms by causing abrasive injuries and by clogging the gills and respiratory passages of various aquatic fauna. Indirectly, suspended solids can screen out light and can promote and maintain the development of noxious conditions through oxygen depletion.

Water Quality-based Effluent Limit—A limit on the concentration of an effluent parameter that is intended to prevent the concentration of that parameter from exceeding its water quality criterion after it is discharged into a receiving water.

### APPENDIX C—TECHNICAL CALCULATIONS

None

# APPENDIX D—RESPONSE TO COMMENTS

No comments received.